

Title (en)

Data transmission system using error correction without expansion of bandwidth

Title (de)

Datenübertragungssystem mit Fehlerkorrektur ohne Vergrößerung der benutzten Frequenzbandbreite

Title (fr)

Système de transmission de données avec correction d'erreurs sans élargissement de la largeur de bande

Publication

EP 0606916 B1 19980408 (EN)

Application

EP 94100459 A 19940113

Priority

JP 463093 A 19930114

Abstract (en)

[origin: EP0606916A1] In an error correction apparatus which includes a transmitter (10) and a receiver (11) and which transmits, from the transmitter to the receiver, a block code which is composed of a data bit signal sequence and a check bit signal sequence for correction of the data bit signal sequence and which has a predetermined frequency band, the transmitter modulates the check bit signal sequence so that a check bit modulated signal is located in a part of the predetermined frequency band with the remaining frequency band occupied by a data bit modulated signal. The receiver (11) separates the data bit modulated signal from the check bit modulated signal by the use of a decision feedback equalizer (29a) and a band pass filter (41) to reproduce the data bit signal sequence and the check bit signal sequence and to correct an error of the data bit signal sequence with reference to the check bit signal sequence reproduced in the receiver (11). <IMAGE> <IMAGE>

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